



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,778	05/03/2005	Stephan Simon	10191/3675	7908

26646 7590 03/05/2007
KENYON & KENYON LLP
ONE BROADWAY
NEW YORK, NY 10004

EXAMINER

TRAN, DALENA

ART UNIT	PAPER NUMBER
----------	--------------

3661

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/533,778

Applicant(s)

SIMON ET AL.

Examiner

Dalena Tran

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 5/3/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Notice to Applicant(s)

1. This application has been examined. Claims 12-28 are pending.

The prior art submitted on 5/3/05 has been considered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 12, 16-23, and 26-28, are rejected under 35 U.S.C. 102(b) as being anticipated by Kodaka et al. (US 2001/0018641 A1).

As per claim 12, Kodaka et al. disclose a method for determining an accident risk of a first object with at least one second object, comprising: determining the accident risk as a function of a collision probability and a hazard probability of the at least one second object in a predefined region, and determining the collision probability and the hazard probability as a function of motions of the first and at least one second object (see the abstract; [0010-0013]; [0044-0047]; and [0131-0138]).

As per claims 16-17, Kodaka et al. disclose the motion of the first object is defined by way of at least one current position and its velocity, and the motion of the first object is defined by way of at least one current position and its velocity (see [0064-0070]).

As per claims 18-21, Kodaka et al. disclose the motion of the at least one second object is defined by way of at least one current position (see [0048-0051]).

Art Unit: 3661

As per claim 22, Kodaka et al. disclose the motion of the first object is additionally determined by way of at least one of its first longitudinal acceleration, first transverse acceleration, a first rotation angle and a first steering angle (see [0111-0119]).

As per claim 23, Kodaka et al. disclose the motion of the at least one second object is additionally determined by way of its velocity relative to the first object and/or a second longitudinal acceleration and/or a second transverse acceleration and/or a second rotation angle (see [0039-0040]).

As per claim 26, Kodaka et al. disclose at least one of an indication and at least one signal to an actuator suite are generated as a function of the accident risk (see [0086-0088]).

As per claims 27-28, Kodaka et al. disclose a method of using a control unit in a vehicle constituting an object, and a method of using a restraint system in a vehicle constituting an object (see [0089-0094]).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 13-15, and 24-25, are rejected under 35 U.S.C.103(a) as being unpatentable over Kodaka et al. (US 2001/0018641 A1) in view of Miller et al. (US 2003/0139881 A1).

As per claims 13-15, Kodaka et al. do not disclose object class. However, Miller et al. disclose an object class of the first and at least one second object are taken into

Art Unit: 3661

account in determining the collision probability and the hazard probability, wherein the motion and the object class of the at least one second object are determined by way of a sensor suite, and the motion and the object class of the first object are retrieved from at least one data source (see [0032-0035]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Kodaka et al. by combining object class for determining appropriately object size or type therefore to provide a proper collision avoidance.

As per claims 24-25, Miller et al. disclose environmental influences and/or a respective driving behavior are taken into account in determining the respective motion (see [0028-0031]).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

. Russell et al. (6675094)

. Stopczynski (6721659)

. Rao et al. (6819991)

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 571-272-6968. The examiner can normally be reached on M-F 6:30 AM-4:00 PM), off every other Friday.

Art Unit: 3661

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Patent Examiner

Dalena Tran



March 1, 2007